

Summarized Report for June 8-12, 2009

BEET LEAFHOPPERS: Beet leafhopper (BLH) populations in the Columbia Basin continue to increase. In the Lower Columbia Basin, BLH counts ranged 3-130 per trap and averaged (38.5). In the Upper Columbia Basin, BLH counts ranged 0-42 per trap and averaged (14.5), with the highest counts in the Quincy area, and the lowest in the areas east of Moses Lake and Warden. Managers of potato fields in areas with the highest counts should be concerned about BLH transmitting BLTVA.

Beet leafhoppers are the only known vector of BLTVA, which causes a disease commonly known as purple top. BLH populations in the Columbia Basin usually begin to build in late May and increase through June. Now is the time to closely monitor BLH populations, because most BLTVA infections occur early in the season (the first eight weeks of plant growth). Treatment thresholds have not been established for BLH in potatoes, but we know that the risk for BLTVA infection increases as the number of BLH increase. If you are finding more than 40 BLH in your traps, it may be time to get worried. We recommend that every grower deploy at least two yellow sticky traps around the margins of each potato field to monitor BLH. Follow the link to "IPM Guidelines for Insects and Mites in Potatoes" for more information about monitoring BLH and managing BLTVA (p. 23-32).

POTATO TUBERWORM MOTHS: One potato tuberworm moth (PTM) was found in a trap near the city of Pasco this week. No other project traps had PTM.

APHIDS: We found more aphids in the Lower Columbia Basin this week; about two-thirds of the fields we sampled had some aphid. Most of these fields had very low counts, averaging less than 1 per plant. The fields that were not treated with a systemic insecticide at planting had higher counts. Growers and fieldmen in the Lower Columbia Basin need to check their fields regularly now for aphids and treat as warranted (see more below). We did not find any aphids in the Upper Columbia Basin this week.

Green peach aphid (GPA) is the most efficient vector of potato leafroll virus (PLRV) which causes leafroll and tuber net necrosis in susceptible cultivars. Early recognition and control of GPA is the best tactic for limiting the spread of PLRV. Even a low incidence of PLRV can spread rapidly if GPA populations go unchecked. Current recommendations are to treat short-season potatoes when counts are 5 aphids/plant, and long-season storage potatoes when there is 1 aphid/plant. Higher action thresholds may be appropriate for cultivars that are less susceptible to PLRV and net necrosis. It is important to keep in mind, however, that aphids spread other viruses and can cause direct injury to plants when aphid densities are high.

OTHER INSECTS: We also found a few Colorado potato beetle (CPB), thrips, and lygus bugs while sampling fields. The CPB were only seen in fields not treated with systemic insecticides at planting. Thrips were seen in most fields, but populations were not large. Beneficial predators, big-eyed bugs and damsel bugs, were also seen in most of the fields sampled.